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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/598,538	06/21/2000	Carl W. Shonk	60,314-098	7679

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EXAMINER	
TRAN, DALENA	
ART UNIT	**PAPER NUMBER**
3661	

DATE MAILED: 11/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/598,538	SHONK, CARL W.	
	Examiner	Art Unit	
	Dalena Tran	3661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 August 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-13,18,20-24 and 26-30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *9-13,18,20-22,24 and 27-30* is/are allowed.

6)☒ Claim(s) *1-8,23 and 26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Notice to Applicant(s)

1. This office action is responsive to the amendment filed on 8/18/05. Claim 1 has been amended. Thus, claims 1-13,18,20-24, and 26-30 are pending.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-3,5-8,23, and 26, are rejected under 35 U.S.C.103(a) as being unpatentable over Xu et al. (6,401,027) in view of Holland (6,321,091).

As per claims 1, and 6, Xu et al. disclose a method for transmitting the location of a vehicle to a location remote from the vehicle comprising the steps: determining a street attribute of the vehicle relative to a road network defined as a first location, and determining a new street attribute of the vehicle relative to a road network defined as a second location (see at least columns 4-5, lines 49-7; columns 7-8, lines 54-11; and columns 9-10, lines 66-40), and automatically communicating the locations of the vehicle to the remote location based upon change in location (see at least column 7, lines 32-53). Xu et al. do not explicitly disclose communicating location of the vehicle at first and second frequency. However, Xu et al. disclose "radio-frequency transmit the vehicle position data" (see at least column 4, lines 25-27), and "the vehicle position data being reported at a predetermined reporting interval" (see at least column 5, lines 6-7), it is obvious that Xu et al. implies the vehicle position being transmitted at interval

frequency. In addition, to modify for the teach of Xu et al. about the communication location of the vehicle at first and second frequency, Holland discloses periodic transmit the previous and actual position locations of objects or person carrying a locator device to the remote location (see at least column 2, lines 21-40; and column 12, line 61 to column 13, line 27). Eventhough, Holland does not explicitly disclose a vehicle. However, it would have been obvious to one of ordinary skill in the art that the locator device disclose in Holland can be located in a vehicle for the purpose of tracking and locate a vehicle position.

Holland also discloses a locator system capable of determining a first and second location of the object or person carrying a locator device and transmit these locations to the remote location at a first and second interval frequency, because Holland discloses in column 2, line 28, the locator device records it previous locations, and actual position (column 2, line 39); therefore, it is obvious that the locator device has its first and second location. The locator device periodically transmits it position data to the remote location (column 2, line 30-32), and it is obvious that the rate of period transmission is implies is the interval frequency transmission depend on the locations. Also, this interval frequency is different, for example, see at least in column 2, lines 32-39, the rate at which the locator device periodically transmits its positional data varies depend on its change physical position (when relatively stationary or moving rapidly). Therefore, it is obvious that the locator system of Holland capable of communicating a first and second location to the remote location at a first and second interval frequency.

Also, Xu et al. do not disclose "suppressing communication of the third location". However, Holland discloses "If the locator device is relatively stationary, the rate of periodic transmission is reduced" (see at least column 2, lines 35-36), it is obvious to one of ordinary skill in the art

that Holland implies a suggesting of "suppressing communication", because when the locator device is relatively stationary, there is no relevant data can be transmit, therefore the communication is suppressed. Also, Holland discloses three separate actions of moving of locator device, for example, "previous location" (column 2, line 28), "relatively stationary" (column 2, line 35), and "moving rapidly to actual position" (column 2, lines 38-39). The relatively stationary is implied as a third location in claim 1, because "if the locator device is relatively stationary, the rate of periodic transmission is reduced" (column 2, lines 35-36). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Xu et al. by combining communicating the first and second locations of the vehicle to the remote location at first and second frequency, second frequency different from first frequency for accurately tracking and monitoring vehicle position and differentiate transmit time when vehicle from position to position, and suppressing communication of the third location for conserving the power consumption transmission of the device, therefore, only report the locations where the vehicle is moving.

Also, as per claim 5, Xu et al. do not disclose a third location is arranged between the first and second location. However, Holland discloses three separate locations of the locator device, for example, "previous location" (column 2, line 28), "stationary" (column 2, line 35), and "actual position" (column 2, lines 38-39). The stationary is implied as a third location in claim 1, and it arranged between previous location, and the actual position. Also, Holland capable of discloses communicating a first and second location to the remote location at a first and second interval frequency, and suppressing communication of the third location with the same discussion as in claim 1 above.

As per claim 2, Xu et al. disclose the location of the vehicle is communicated with reference to the road network (see at least column 4, line 49 to column 5, line 7; column 8, line 40 to column 9, line 2; and column 9, lines 57-62).

As per claim 3, Xu et al. disclose the road network is in a map database (see at least column 7, lines 13-30; and column 8, lines 18-39).

As per claims 7-8, Xu et al. do not explicitly disclose the first location is a first street, and first street address; the second location is a second street, and second street address. However, Xu et al. disclose transmit vehicle position to the remote location, and vehicle position on the road network (see at least column 7, lines 20-53). It is obvious to one of ordinary skill in the art that the road network included a street and street address. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Xu et al. by combining the first location is a first street, and first street address; the second location is a second street, and second street address for accurately determine the actual street the vehicle is traveling in related to the data transmit to the remote location.

As per claim 23, Holland discloses the interval frequencies define a data transmission interval (see at least columns 2-3, lines 21-20; and columns 12-13, lines 61-21).

As per claim 26, Xu et al. disclose the street attribute is one of street name, street address and street segment, street intersection (see at least column 4, lines 22-25; columns 8-9, lines 40-2; and column 13, lines 21-37).

4. Claim 4, is rejected under 35 U.S.C.103(a) as being unpatentable over Xu et al. (6,401,027), and Holland (6,321,091) as applied to claim 3 above, and further in view of Zijderhand (5,598,167).

As per claim 4, Xu et al., and Holland, do not disclose the location of the vehicle is determined by map-matching. However, Zijderhand discloses the location of the vehicle is determined by map-matching (see at least column 5, lines 53-58). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Xu et al., and Holland by combining the location of the vehicle is determined by map-matching to provide information about the actual location of a vehicle as it moves over streets.

5. Claims 9-13,18,20-22,24, and 27-30, are allowable.

Remarks

6. Applicant's argument filed on 8/18/05 has been fully considered. However, the rejection of claims 1-3, 5-8, and 26 still keep as above. Also, the allowance of claim 23 in the last office action is withdrawn because the examiner overlook the dependency of claim 23, and the rejection is updated as above.

Applicant's argue that nothing in Holland suggests suppressing communication. However, Holland discloses in column 2, lines 32-37, "the rate at which the locator device periodically transmits its position", this obvious implies the transmission frequency of locations in Holland. Also, Holland discloses this rate of transmission varies according to the rate of locator device changes its physical position, therefore, it is obvious, Holland discloses the transmission depended on changing of positions. In addition, Holland discloses if the locator device is "relatively stationary", the rate of transmission will be reduced" (column 2, lines 35-36), it is obvious to one of ordinary skill in the art that Holland suggests of "communication suppressed" because there is no relevant information can be transmitted when the location device is stationary. Therefore, Hollands suggests suppressing communication.

There is no new references in this rejection.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dalena Tran whose telephone number is 571-272-6968. The examiner can normally be reached on M-F (6:30 AM-4:00 PM), off every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on 571-272-6956. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Patent Examiner
Dalena Tran
Dalena Tran
October 27, 2005